Accelerate™

VoIP Solutions for Wireless and Wireline Networks



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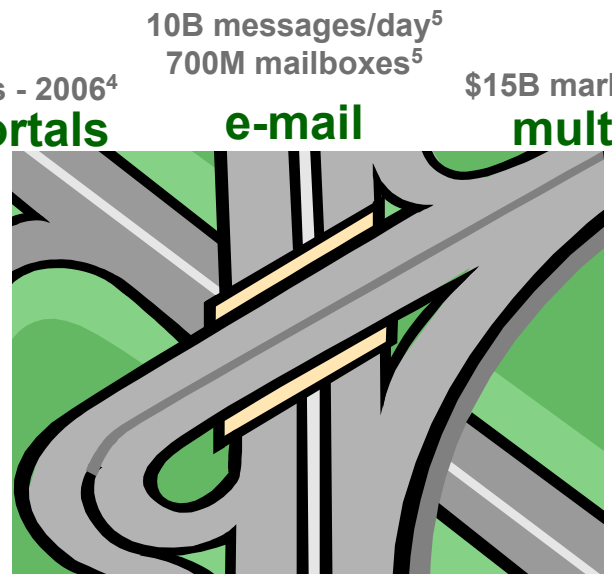
Lucent Technologies
Bell Labs Innovations

Forces Driving Next-Gen Voice/Data

- **Subscribers want access to communications services from many places…**
  - Home, office, or on-the-go: *mobility isn't just wireless voice anymore*!
- **…from several devices…**
  - Telephones, PCs, mobile phones, PDAs
- **…without needing separate accounts**
  - Single sign-on, common contacts, and "access-aware" information delivery



Sources

1. Lucent research
2. GSM Association
3. Radicati
4. UMTS Forum
5. IDC, June 2001

Subscriber Needs Drive Next-Gen Networks

To Capture the Subscriber Wallet, Service Providers Seek Networks That Will Deliver…

- **A Broad Range of Applications that Meet Customer Needs and Accelerate Revenue**
  - Application bundles that increase end-user retention
  - Fast deployment of enhanced services to differentiate and compete
  - Flexibility in content and micro-billing strategies for new applications
- **A Solution that Accelerates Return on Investment**
  - Converged multi-media solutions that span wireless and wireline networks
  - Leverage investments across many applications and market segments
  - Standards-based architecture operable in multi-vendor environments
- **The ability to simplify network operations**
  - Ease of managing and provisioning new solutions
- **Security across all network layers and services**
  - Ability to offer QoS to match security needs

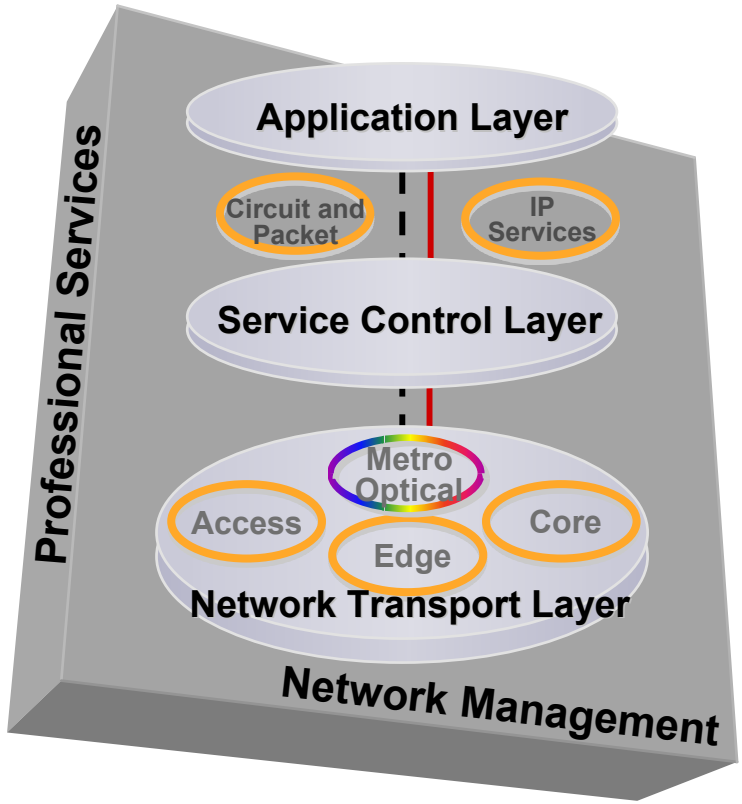
Service Providers Want More Than Just VoIP; They Require "*Value" over IP*

Accelerate™

Market-Focused VoIP Solutions

Generate new revenue while lowering operations costs

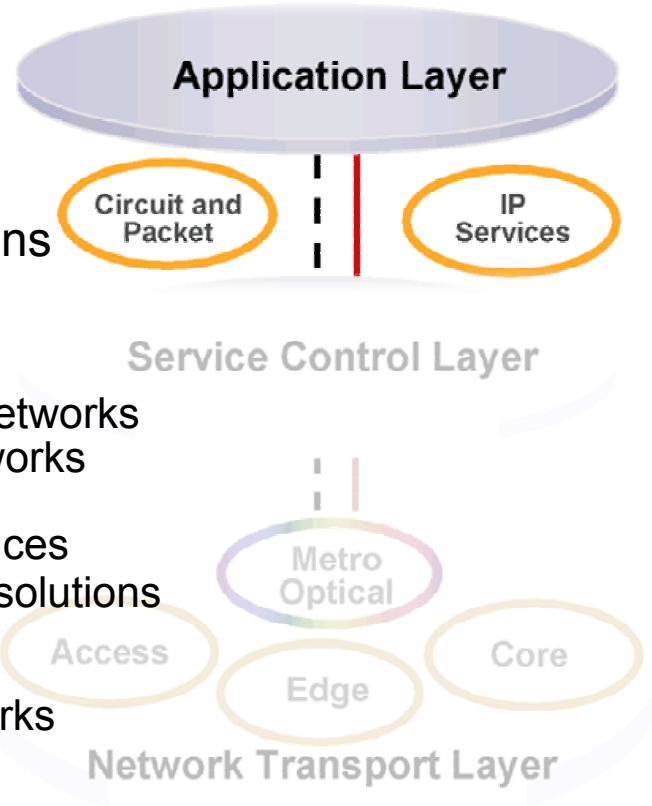
- Next-generation applications solutions
- VoBB residential/business solutions
- Service provider trunk solutions
- Local network solutions
- Wireless solutions
- Enterprise solutions



VoIP Solutions For Next-Gen Networks

Systems For The Application Layer Drive Value Top-Down

- **AnyPath® Messaging** - Leverages and extends current wireline/wireless unified communication applications into IP networks
- **EBS** - Enhanced Business Services web portal software for deploying next-generation applications
- **PacketIN** Application platform with service enablers:
  - SDHLR Distributed HLR for wireless 3G mobile networks and subscriber database for converged all-IP networks
  - SIP server SIP application server for VoIP
  - eMRS Media server for enhanced telephony services
  - Feature Suite Routing and local feature software solutions
- **MiLife™ Solutions Suite**
  - SurePay® – Prepaid platform for converged networks
  - ISG – OSA service mediation gateway
  - Enhanced VPN – extends VPN to mobile users
  - Short Message Service Center (SMSC) – supports short messaging on wireless



NEW **Solution Partner Program** – A forum for enabling the rapid development of 3rd party applications and end-to-end solutions

Any Application, Any Endpoint, Any Network

Accelerate™

Systems for the Service Control Layer Deliver Value at the Core

- **Lucent Softswitch** – Unified softswitch delivers advanced next-generation services across wireline and mobile (CDMA, UMTS, and complementary WiFi) networks

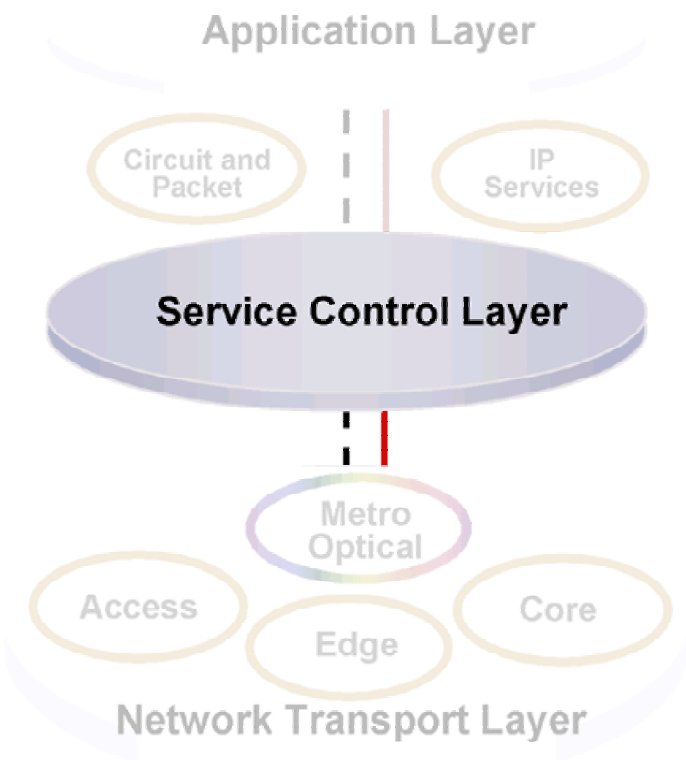
NEW

- **5E-XC™** – Triple the capacity; interface to IP; evolution to softswitch control

- **Flexent® Mobility Server** – Call control for CDMA and TDMA wireless

- **iGEN™ Compact Switch** "Switch-on-a-pack" architecture for independent operating companies, CLECs, cable companies, PTTs

NEW



Adding Next Generation Call Control Can Leverage And Evolve Current Network Assets

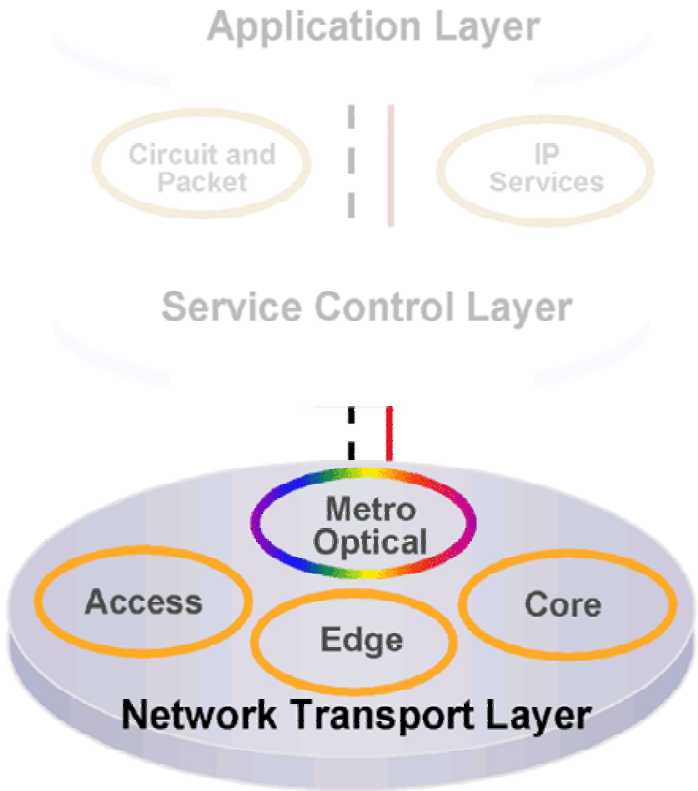
Accelerate™

Transport And Access Layer Requires Flexible Gateways and Security Systems

- **Flexible VoIP Gateways**

NEW

  - **Intelligent Media Gateway** – Provides VoIP functionality for the **AnyMedia™ Access System**, a next generation access platform
  - **MaxTNT & APX Universal Gateways** – PSTN VoIP Trunk Gateways; enabling any service on any port
  - **iMerge ™ Gateway** – Delivers IP voice services to enterprises and residential users
- ***PacketStar*® PSAX Multiservice Media Gateways** - Supports voice over packet services for a broad range of ATM multi-service applications
- **Flexent® Mobile Access Product Line** – Radio access solutions for CDMA2000 and UMTS mobile networks provide superior capacity, coverage, and QoS options for real-time VoIP applications like Push-to-Talk
- **Lucent VPN Firewall** – Secures all networks from road warriors to enterprise (Bricks, IPSec Client, SMS)
- **AccessPoint™ Routers** – Secure IP service routers



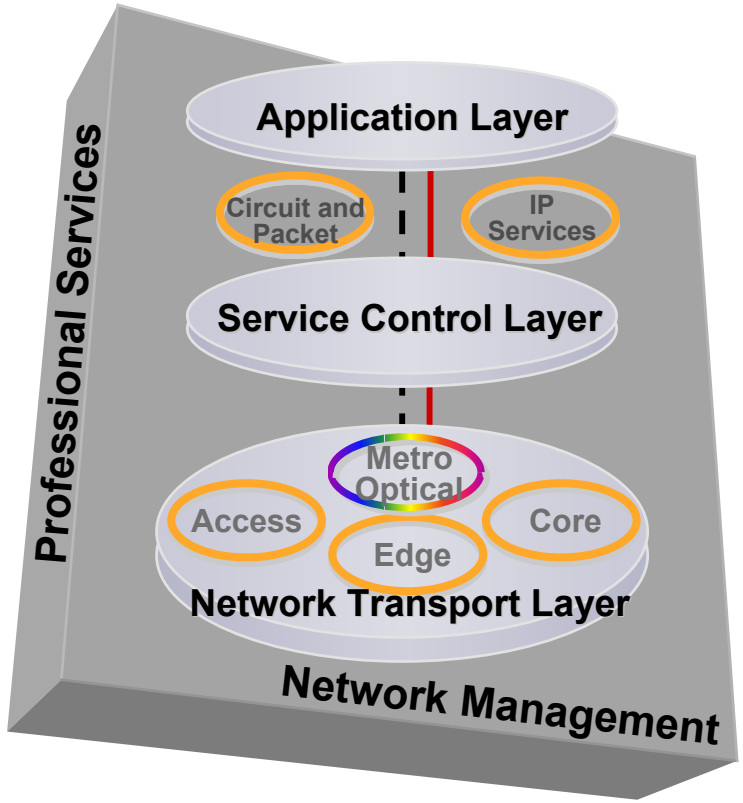
IP Enabling Transport, Without A Forklift Upgrade

Accelerate™

Network Management and Professional Services Surround Lucent Solutions

Navis iOperations Software

- Integrated solution for end-to-end service creation, provisioning, monitoring and service quality management over multi-vendor, multi-technology networks
  - iAssure ensures QoS and SLAs across PSTN and IP networks
  - iProvision streamlines VoIP operations with flow-through provisioning and activation



Lucent Worldwide Services (LWS)

- LWS VoIP consultants can plan, design, integrate, maintain, and operate VoIP networks, speeding time-to-market and mitigating risk
  - VoIP Readiness Service
  - Network Operations & Planning Service
  - Deployment Services
  - Security Assessment Services

ServiceReady™ VoIP Solutions Speed Deployment And Mitigate Risk

Embedded Base Ready To Be IP-Enabled

5ESS Switch	6,500 switches deployed globally with 300 million ports
Lucent Softswitch	8 carrier networks globally
AnyPath Messaging	10 million mailboxes deployed worldwide
EBS Multimedia Portal	Award winning communications portal with 8 carrier trials (2003 Winner: SuperQuest Supercomm, ICCM, TMC Telephony)
AnyMedia Access System	39,000 systems shipped, 4.5 million voice lines, 1.2 million ADSL ports
Universal Gateways	30 million remote access ports, 4 million VoIP ports
PSAX	Carrier Deployments in over 20 Countries globally
Navis Software	1,100 Carrier and enterprise customers spanning mobile and wireline networks

Selected Lucent VoIP Trials And Deployments

- Trial in China addressing voice over broadband and enterprise services
- Mobile/wireline converged solution in North America using AnyPath Messaging
- Evolving 5E-XC and AnyMedia assets for local network solutions in the U.S.
- Centrex VoIP/EBS architecture in the U.S.
- Wireless carrier deploying voice over broadband and enterprise services in the U.S.
- Trial in Europe voice-enabling a Universal Gateway network with Lucent Softswitch

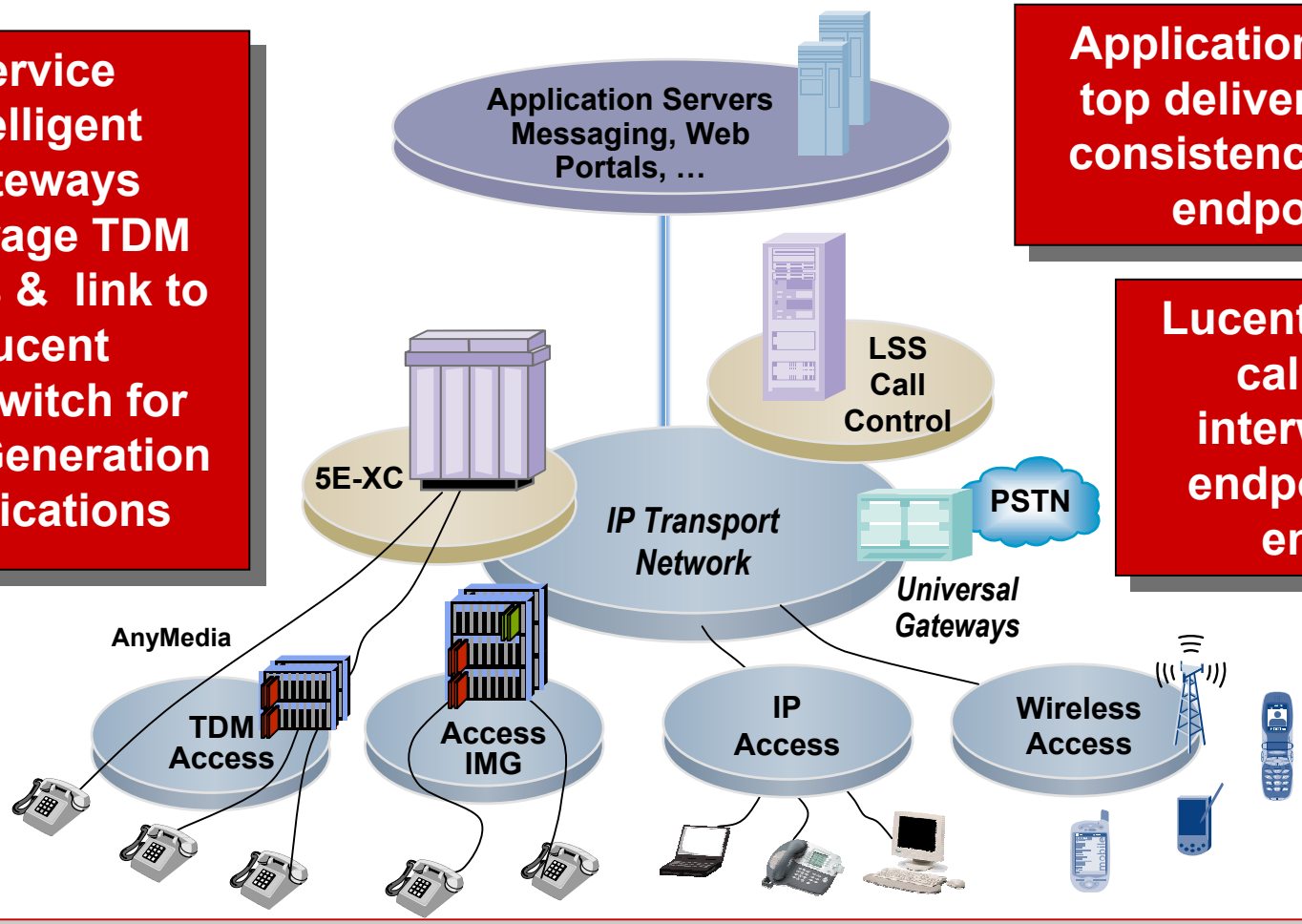
Accelerate™

Solutions for Circuit and Softswitch Driven Networks

Service Intelligent Gateways Leverage TDM assets & link to Lucent Softswitch for Next Generation Applications

Application's at the top deliver service consistency across endpoints

Lucent Softswitch call control interworks any endpoint to any endpoint



A Clear Path to Service Intelligent Next Generation Networks!